

SOME NEW WORLD XYLOTINAE

(Diptera: Syrphidae)

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Several interesting species of Syrphid flies belonging to the subfamily Xylotinae have recently been discovered among miscellaneous material. These flies are here described. The genus *Crepidomyia* is neotropical; heretofore only four species have been known.

Crepidomyia dion Hull, new species

Related to *C. darlingtoni* Hull. There is no spur on the hind tibiae. The wings are quite dark, but the general color is blue-black. There are no yellow spots upon the second abdominal segment. Length 13.5 mm.

Female. *Head*: the face, cheeks, front, vertex and occiput are black. There is a narrow band of white pubescence along the sides of the face adjacent to the lateral carina. The lateral and medial carina are quite sharp. There is a transverse band of whitish pollen across the middle of the front expanded somewhat near the eye margins; this band when viewed anteriorly becomes pale brown in front of the ocelli. The immediate rim of the preantennal callus and the inner portion of the antennal pits are light yellowish-brown. The antennae are black, the arista missing; antennal pile black. The pile of the upper front is black; across the middle front it is whitish and the few hairs of the face are white. The occipital pollen is greyish-white; the pile is whitish becoming black dorsally. *Thorax*: the mesonotum is quite dull black, a little more shining upon the postcalli, the area in front of the calli and upon the scutellum. There are only very faint traces of pollinose vittae submedially and sublaterally upon the mesonotum, but there is a prominent yellowish white triangle of pollen medial to and adjacent to the humerus; it becomes evanescent after curving around behind the humerus. The transverse suture is conspicuously margined with pollen of the same color which reaches only to the notopleura. The mesonotum, including the scutellum, is densely covered with appressed black setae and has scattered longer black hairs. The scutellar fringe is quite copious and white. The pleura are shining black with thinly dusted whitish pollen and only scattered white hairs. The squamae are greyish-white basally but widely blackish-sepia along the margin and fringe. Halteres reddish-orange. *Legs*: entirely black except the hind basitarsi which are perhaps dark reddish to orange-brown and pale yellow pilose.

The hind femora are moderately thickened in the middle with heavy spines throughout their length. The hind trochanters have a short, sharp, black spur apically. The hind tibiae end without spur. *Wings*: deeply sepia-brown beginning at the base of the submarginal cell, becoming paler on the discal cell and at the apex of the wing. The pterostigma is still more blackish except towards the apex where it too becomes pale. The small cross vein is slightly recurrent apically, pulled out apically and hence oblique, and joins the discal cell beyond the middle. The third vein is gently curved backward. The marginal cell is opened as wide as its apical width; the whole basal portion of the wing is pale brown with slight yellowish cast with the exception of the basal portion of the marginal cell and extreme base of the basal cells which are almost hyaline. The wings have a distinct purplish reflection, greatest when viewed from the ventral surface and greater from the blackish areas. *Abdomen*: slightly widest upon the third segment which has approximately parallel sides; the fourth segment is a little narrowed. The fifth segment is creased upon the outer third near the middle creating the impression of two segments. The entire abdomen is dully shining black and slightly greasy. The pile is short, appressed, black, but yellow laterally on the sides of the first and second segments, in the middle posteriorly on the fourth segment and upon all of the fifth segment.

Holotype: female, CHANCHAMAYO, PERU, Jan. 3, 1949. J. Schunke. Type in author's collection.

Crepidomyia cybele Hull, new species

Distinct in the stripes of golden appressed pile on the mesonotum and the light brownish-orange face. Not closely related to other species. Length 12.5 mm.

Female. Head: the face is light brownish-orange with dense golden pubescence reaching almost to the blunt medial carina and the blunt lateral carina. The cheeks are brassy black; the front is black and quite brassy in reflection with an obscure band of golden-brown pollen across the middle of the front and pale yellow pile which is more or less concentrated in an oval patch along the eye margin on each side of this band. Just before the narrow pre-antennal callus there is a transverse depression. The vertex is shining black, greenish to brassy in reflection with seven black hairs behind and perhaps as many in front. The first segment of the antennae is blackish, the second is dark brown, the third missing; the facial pile is yellow and the occiput brassy black, yellowish pollinose with pale brassy pile throughout. *Thorax*: the mesonotum is black with a broad, medial, posteriorly furcate, faint, reddish sepia pollinose vitta and still more faint similar ones sublaterally; the lateral margins throughout and the medial vitta, at least upon the

anterior half is densely appressed, greenish brassy pilose; the pleural and scutellar pile is of the same color; the reflection of the scutellum is brassy, its apex with deeply crimped margin and copious, conspicuous, brassy ventral fringe. Squamae and fringe and halteres pale orange. The anterior and middle legs, except for coxae and trochanters, are entirely bright clear egg-yellow with similarly colored pile. The hind femora are yellowish-brown basally, becoming reddish through the middle, still darker at the apices, their pile golden except apically, their ventral margins with nine stout, sharp, black, spinous setae. The hind tibiae are nearly blackish but actually dark reddish-sepia, especially ventrally and basally; their pile is black, except for a short streak of golden hair baso-laterally and medio-apically. The hind tibiae have two stout, bidentate, short, spinous processes, deep cleft between. Hind tarsi yellowish-brown, most of their dorsal pile golden. *Wings*: almost uniformly tinged with pale yellowish-brown; the costal cell and the first basal cell are light yellow; the pterostigma is deep yellow except apically; the marginal cell is opened as wide as its apical width; the third vein is more gently concave than in *dion* n. sp; the small cross vein is more oblique, not recurrent, entering the discal cell barely beyond the middle. *Abdomen*: black, but shining brassy to purplish on the first segment and the sides of the second, third and fourth segments. These latter segments are broadly opaque black down the middle and the opaque color is expanded posteriorly to include most of the posterior margin and anteriorly expanded only upon the second and fourth segments. Pile upon the brassy areas and sides long, erect and pale yellow. Upon the black areas short, black and quite appressed.

Holotype: female, CHANCHAMAYO, PERU, Jan. 20, 1949, J. Schunke. Type in author's collection.

Neplas sapphirina Hull, new species

Related to *bidens* Curran. The third abdominal segment is wholly shining green without opaque areas or subbasal reddish-brown bands. The second segment has a strong bluish cast especially anteriorly and laterally. Hind femora strongly bluish basally, greenish apically. Length 10.7 mm.

Male. *Head*: face black except above the epistoma where it is pale yellow. The cheeks are black; the front is brassy black and bare upon a broad rectangle lying upon the lower half of the front. The upper half of the front is linearly notched antero-medially and the sides of the front and the whole of the face are pale yellowish-white pubescent. The frontal and facial pile is yellowish-white; the face has a sharp medial carina. The first two segments of the antennae are nearly black; the third is elongate, twice as long as its basal width; it is a little more narrow on the apical half and black with the base dull reddish, the pile white. The vertex is dully shining black with the area across the front of the ocelli opaque blackish and the

anterior half of the vertical triangle yellowish white pollinose and yellow pilose. All vertical pile and all occipital pile pale; the upper occipital hairs are more deeply yellow or reddish-yellow. The eyes touch for about ten facets; the anterior facets are considerably enlarged. *Thorax*: the mesonotum is black, rather shining, with three faint, coppery vittae, the region between is faintly greenish; the post calli and the scutellum have bluish reflections; the mesonotal pile is short, erect and black with vittae of pale brassy pile. There is a pair of wide, widely separated, brassy stripes which begin anteriorly but become quite slender at the base of the scutellum; they merge into a transverse, wide band of similarly colored pile in front of the scutellum. There is a narrow medial vitta, a sutural marginal vitta and a sublateral stripe running from the suture back to the scutellum, all of pale yellow pile. The pile in front of the suture is thinly yellowish and there is a conspicuous, yellowish-white patch of pollen bordering the humerus medially. The scutellar pile is abundant and pale yellow. The pleura are bluish black with nearly white pile. The white squamae have a blackish sepia border and fringe. Halteres yellowish. *Legs*: the anterior and middle femora are quite black; their apices are narrowly brownish-yellow. Hind femora are immensely thickened, shining black with bluish reflections, very dark reddish-brown at the apex, with five apico-lateral, sharp, black spines ventrally. The pile of the femora for the most part is nearly white. The anterior and middle tibiae are black but light yellow diffusely on the basal fourth or less. The first two segments of anterior and middle tarsi are yellowish white; remaining segments black. Hind tibiae black, the base narrowly whitish, the dorsal pile whitish, the ventral pile short and black. These tibiae are quite concave with knife-edge both basally and apically; the ventral spur is quite long and flattened, rounded and pale at the apex. The hind tarsi are black on the last four segments, sepia on the basal one, the dorsal pile pale. *Wings*: greyish hyaline, the pterostigma dark brown. *Abdomen*: slightly narrowed at the end of the second segment. The second segment is long; it is one and three-fifths longer than its posterior width and distinctly emarginate and except at the apex, with a deep shining blue reflection. Viewed from the rear this segment is dully opaque through the middle and more widely at base and at apex. The first segment is black, dully shining, transversely striate with faint bluish reflections. The second segment is also markedly striate. Third segment and the fourth entirely shining greenish brassy in color. The pile is yellowish white basally becoming black along the posterior margin except at the sides. All of the pile of the fourth segment is brassy-yellow. The fourth sternite is crimped into a thin median ridge. Pile of first and second segments whitish along the sides.

Holotype: male, CHANCHAMAYO, PERU, August 1, 1948, J. Schunke. *Paratypes*: two males, same data. Types in author's collection.